

Appl No.: 10/765,729

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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1(Currently Amended). A method of operating air conditioner condenser or heat pump blades, comprising the steps of:

providing twisted blades about a rotatable hub, each blade having a root end and a tip end and a continuous twist therebetween, each of the twisted blades having a root end angle of twist that is greater than a tip end angle of twist;

rotating the blades within an air condition condenser or a heat pump at up to approximately 850 rpm;

generating airflow from the ~~running-rotating~~ blades of up to approximately 1930 cfm; and

requiring power from a 1/8 hp PSC motor of up to approximately 110 Watts while running the blades and generating the airflow.

Claim 2(Original). The method of claim 1, wherein the motor includes: an 8-pole PSC motor.

Claim 3(Original). The method of claim 1, wherein the blades include fan diameters of approximately 19 inches.

Claim 4(Original). The method of claim 1, wherein the blades include fan diameters of approximately 27.6 inches.

Claim 5(Canceled).

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Claim 6(Currently Amended). A method of operating air conditioner condenser or heat pump blades, comprising the steps of:

providing twisted blades about a rotatable hub, each blade having a root end and a tip end and a continuous twist therebetween, each of the twisted blades having a root end angle of twist that is greater than a tip end angle of twist;

rotating the blades within an air conditioner condenser or heat pump up to approximately 1100 rpm;

generating airflow from the ~~running~~ rotating blades up to approximately 2600 cfm; and

requiring power from a motor up to approximately 145 Watts while running the blades and generating the airflow.

Claim 7(Original). The method of claim 6, wherein the motor includes: a 6-pole 1/8 hp PSC motor.

Claim 8(Original). The method of claim 6, wherein the blades include fan diameters of approximately 19 inches.

Claim 9(Currently Amended). The method of claim ~~4~~, 1, wherein the blades include fan diameters of approximately 27.6 inches.

Claim 10(Canceled).

Claim 11(Currently Amended). A method of operating air conditioner condenser or heat pump blades, comprising the steps of:

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providing twisted blades about a rotatable hub, each blade having a root end and a tip end and a continuous twist therebetween, each of the twisted blades having a root end angle of twist that is greater than a tip end angle of twist;

rotating the blades within an air condition condenser at up to approximately 850 rpm;

generating airflow from the ~~running-rotating~~ blades of up to approximately 1930 cfm; and

requiring power from a motor of up to approximately 110 Watts while running the blades and generating the airflow.

Claim 12(Original). The method of claim 11, wherein the motor includes: a 6-pole 1/8 hp motor operating at 1100 rpm and producing a flow of 2600 cfm at 145 W.

Claim 13(Original). The method of claim 11, wherein the blades include fan diameters of approximately 19 inches.

Claim 14(Original). The method of claim 11, wherein the blades include fan diameters of approximately 27.6 inches.

Claims 15-17(Cancelled).

Claim 18(Original). The method of claim 11, further comprising the step of:
providing two twisted blades on opposite sides of a hub.

Claim 19(Original). The method of claim 11, further comprising the step of:
providing three twisted blades equally spaced apart from one another about a hub.

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Claim 20(Original). The method of claim 11, further comprising the step of:
providing four twisted blades equally spaced apart from one another about a hub.

Claim 21(Original). The method of claim 11, further comprising the step of:
providing five twisted blades equally spaced apart from one another about a hub.

Claim 22(Original). The method of claim 11, further comprising the step of:
providing twisted blades asymmetrically spaced apart from one another about a hub.

Claim 23(Original). The method of claim 11, further comprising the step of:
providing five twisted blades asymmetrically spaced apart from one another about a hub.

Claim 24(Currently Amended). An air conditioner condenser or heat pump fan assembly, comprising:

a hub connected to an air conditioner or a heat pump;

a first twisted blade attached to the hub, the first twisted blade having a continuous twist running from a root end to a tip end of the first twisted blade, the root end having a root angle of twist that is greater than a tip angle of twist at the tip end;

a second twisted blade attached to the hub, the second twisted blade having a continuous twist running from a root end to a tip end of the second twisted blade, the root end having a root angle of twist that is greater than a tip angle of twist at the tip end; and

a motor generating substantial CFM(cubic feet per minute) from a limited RPM(revolutions per minute) rotation of the blades while using limited power watts of the motor.

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Claim 25(Original). The assembly of claim 24, wherein approximately 1930 CFM of air flow is generated using approximately 110 Watts of power while running the blades at approximately 850 RPM.

Claim 26(Original). The assembly of claim 24, wherein the motor includes: an 8-pole motor.

Claim 27(Original). The assembly of claim 24, wherein approximately 2610 CFM of air flow is generated using approximately 145 Watts of power while running the blades at approximately 1100 RPM.

Claim 28(Original). The assembly of claim 24, wherein the motor includes: a 6-pole motor.

Claim 29(Original). The assembly of claim 24, wherein approximately 1900 to approximately 2600 CFM of air flow is generated using approximately 110 to approximately 145 Watts of power while running the blades at approximately 1100 RPM.

Claim 30(Original). The assembly of claim 24, further comprising: a third twisted blade.

Claim 31(Original). The assembly of claim 30, further comprising: a fourth twisted blade.

Claim 32(Original). The assembly of claim 31, further comprising: a fifth twisted blade.

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Claim 33(Original). The assembly of claim 30, further comprising:

means for orienting the blades into an asymmetrical configuration to reduce dB levels of the assembly.

Claim 34(Original). The assembly of claim 31, further comprising:

means for orienting the blades into an asymmetrical configuration to reduce dB levels of the assembly.

Claim 35(Original). The assembly of claim 32, further comprising:

means for orienting the blades into an asymmetrical configuration to reduce dB levels of the assembly.

Claim 36(Canceled).

Claim 37(Original). The assembly of claim 24, further comprising:

an overall diameter across the blades being approximately 19 inches.

Claim 38(Original). The assembly of claim 24, further comprising:

an overall diameter across the blades being approximately 27.6 inches.

Claims 39-59(Canceled).

Claim 60(New). The assembly of claim 24, wherein each blade includes:

a concave curved shaped leading edge between the tip end and the root end; and

a concave curved shaped trailing edge between the tip end and the root end.

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Claim 61(New). The assembly of claim 24, wherein each blade includes:

- a convex curved leading edge between the tip end and the root end; and
- a concave curved trailing edge between the tip end and the root end.

Claim 62(New). The assembly of claim 61, wherein the tip end of each blade includes:

- a sharp angled hook shaped end.

Claim 63(New). The method of claim 1, wherein each blade includes:

- a concave curved shaped leading edge between the tip end and the root end; and
- a concave curved shaped trailing edge between the tip end and the root end.

Claim 64(New). The method of claim 1, wherein each blade includes:

- a convex curved leading edge between the tip end and the root end; and
- a concave curved trailing edge between the tip end and the root end.

Claim 65(New). The method of claim 64, wherein the tip end of each blade includes:

- a sharp angled hook shaped end.

Claim 66(New). The method of claim 6, wherein each blade includes:

- a concave curved shaped leading edge between the tip end and the root end; and
- a concave curved shaped trailing edge between the tip end and the root end.

Claim 67(New). The method of claim 6, wherein each blade includes:

- a convex curved leading edge between the tip end and the root end; and
- a concave curved trailing edge between the tip end and the root end.

Claim 68(New). The method of claim 67, wherein the tip end of each blade includes:

- a sharp angled hook shaped end.

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Claim 69(New). The method of claim 11, wherein each blade includes:

- a concave curved shaped leading edge between the tip end and the root end; and
- a concave curved shaped trailing edge between the tip end and the root end.

Claim 70(New). The method of claim 11, wherein each blade includes:

- a convex curved leading edge between the tip end and the root end; and
- a concave curved trailing edge between the tip end and the root end.

Claim 71(New). The method of claim 70, wherein the tip end of each blade includes:

- a sharp angled hook shaped end.